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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

MN

Office Action Summary	Application No.	Applicant(s)	
	09/997,530	MASTER ET AL.	
	Examiner	Art Unit	
	Daniel Pan	2183	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 09 August 2007.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-5,7-57,59-80,82-88,115,116,118-128,144 and 145 is/are pending in the application.

4a) Of the above claim(s) 6,58,81,89-114,117 and 129-143 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-5,7-57,59-80,82-88,115,116,118-128,144 and 145 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 30 November 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 1-5,7-57,59-80,82-88,115,116,118-128,144,145 are presented for examination. Claims 6,58,81,89-114,117, 129-143 have been canceled. TD. on 12/04/06 has been received.

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policyreflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel,422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminaldisclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/241,009. Although the conflicting claims are not identical, they are not patentably distinct from each other because although current claim 1 did not specifically show the first routable and executable information module having the first configuration and having the routing sequence as claimed in the co-pending claim 1, the current claim 1 disclosed configuration information and the plurality of routing elements adapted to provide a selected operating mode by selectively selecting data and the configuration

information (see current claim 1, lines 9-12), which was recognizable by one of ordinary skill in the art that the plurality of routing elements were would also applicable for routing sequence for the purpose of selecting the operating mode for routing of the selected data.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. Patent number has not been issued at this time.

4. Claims 1,9,10,11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The reasons are given below.

5. As to claims 1,9,10,11, claims 1,9,10,11are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 7 , lines 1-3,15,31, the system for adaptive configuration is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., [wireless base station]) and intangible embodiments (e.g., [wireless link] [air interface]). See also page 9. line 31 [wireless interface], page 27, line 10 [download through other medium], page 27, lines 29,30 [wireless download]. No clear adaptive configuration system can be found. As such, the claim is not limited to statutory subject matter and is therefore non-statutory. The invention is not restricted into the hardware. For example, routing of the first subset configuration information and the routing of the data through the interconnect network

could be done over the air interface, for example the wireless download, therefore, it is not concrete and tangible. The first subset of configuration information is non-functional descriptive material. The downloaded configuration information can be in the form of frequency waves transmitted in the air space or the wireless download, therefore, it is directed to a non-statutory subject matter. No specific type of interconnection network and the computational elements are being reflected into the claims. Therefore, interconnection network and the computational elements are read as a general arrangement of the functional parts.

6. Claims 1-5,7-15, 17, 18, 20,21,23,27-31, 115-128, 144,145 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (5,768,561) in view of Brewer (5,519, 694).

7. As to claims 1,8, 17, Wise disclosed a system for adaptive configuration, the system comprising:

a) a first set of configuration information (see fig.137) , the first set of configuration information including a first subset of configuration information (see carry-save multiplier , carry save adder, carry save subtractor) and a second subset of configuration information (carry-save multiplier , carry save subtractor, carry save subtractor);

b) a plurality of heterogeneous computational elements, the plurality of heterogeneous computational elements including a first computational element (see resolving adder at y input) and a second computational element (see the d multiplier at x) , the first

computational element having a first fixed architecture (adder) and the second computational element having a second fixed architecture (multiplier) , the first fixed architecture being different than the second fixed architecture; and

c) an interconnection network (see common block in fig.137) coupled to the plurality of heterogeneous computational elements, the interconnection network operative to configure the plurality of heterogeneous computational elements for a first functional mode x[3,4] of a plurality of functional modes, in response to the first subset of configuration information (see configuration carry-save multiplier, carry save adder, carry save subtractor in the common block), and the interconnection network further operative to reconfigure the plurality of heterogeneous computational elements for a second functional mode (x[2,5]) of the plurality of functional modes, in response to the second sub set of configuration information (see carry save multiplier, carry save subtractor, carry save subtractor) , the first functional mode (x[3,4]) being different than the second functional mode (x[2,5]);

d) a plurality of switching elements (see multiplexer circuit in fig.137).

8. Wise did not specifically show the first level and the second level as claimed. However, Brewer taught a switching network included multiple levels of routers or switches (see multistage routers in col.2, lines 14-27, col.8, lines 19-38 for two level hierarchy routers, see also col1. lines 5-15 for background teaching of the routers and

switches). It would have been obvious to one of ordinary skill in the art to use Brewer in Wise for including the first level and second level as claimed because the use of Brewer could provide Wise the ability to include deeper levels of interconnection network , thereby expanding the system interconnectivities, and because Wise also taught a memory map for mapping hardware resources into the memory address (see col.259, lines 10-25), and that his multiplexed network (see interconnection common box in fig.137) showed the points at which needed to be stored (see col.262, lines 14-20), which was recognizable by one of ordinary skill in the art that Wise's mapping of hardware resources were applicable for multilevel of the interconnect for purpose of higher level of network multiplexing.

9. As to claim 2, Wise also included a first system operating mode (see carry-save multiplier , carry save adder, carry save subtractor).

10. As to claim 3, Wise also included a second system operating mode (carry-save multiplier , carry save subtractor, carry save subtractor).

11. As to claim 4, wise also taught the first set of configuration information corresponds to a first system reconfiguration capacity (see the y[3,2] x[3,4] connection path in fig.137) and the second set of configuration information corresponds to a second system reconfiguration capacity (see the y[7,6] , x[2,5]) .

12. As to claim 5, see fig.137.

13. As to claim 7, Wise showed the storage of the configuration information (see the RAM organized into common control block in col.265, lines 43-53, see also the common control block in fig.137).

14. As to claim 9, The system of claim 1, wherein the first set of configuration information is stored in a machine-readable medium (see microprocessor read port in col.260, lines 32-35, see RAM in col.265, lines 43-53).

15. As to claims 10, 11, Wise also taught the transmission through an air interface (carrier waves, see col.4, lines 21-23) , and transmitted through a wireline interface (see telephone line in col.4, lines 13-14.

16. As to claims 12,13, Wise also taught configuration information embodied as a plurality of discrete information data packets (see Discrete cosine transform in col.4, lines 1-11 for background, see also the data packet in col.13, lines 53-57).

17. As to claim 14, Wise also taught memory, addition (see adder) , multiplication (see multiplier) , complex multiplication , subtraction (see subtractor) , configuration, reconfiguration, control, input, output (input and output) , and
field programmability (see dynamic adaptive configuration in col.6, lines 57-67, col.7, lines 1-12).

18. As to claim 15, Wise also included linear algorithmic operations (see col.4, lines 8-9), non-linear algorithmic operations (see the transforms), finite state machine operations (see state machine stages in col.30, lines 62-67, col.31, lines 1-4), controller operations, memory operations (see col.39, lines 35-57), and bit-level manipulations (see bit operation in col.40, lines 15-28).

19. As to claim 18, Wise was also operative to time and schedule the configuration and reconfiguration of the plurality of heterogeneous computational elements with corresponding data (see the pipeline control of the algorithm and the control clock signals in col.262, lines 55-65).

20. As to claim 20, Wise also included second d plurality of heterogeneous elements configured for controller to direct and schedule the configuration of the first and second modes (see the clock control circuit at input in fig.141).

21. As to claim 21, Wise also included a second plurality of heterogeneous computational elements is further adapted to time and schedule the configuration and

reconfiguration of the plurality of heterogeneous computational elements with corresponding data (see fig.141 the output clock latches).

22. As to claim 23. Wise did not explicitly show the mobile station having a plurality of operating modes. However, Wise in the background taught carrier waves by a transmitter (see carrier waves, see col.4, lines 21-23). Therefore, Wise must have included a mobile station.

23. As to claim 27, Wise also taught request for configuration information (seem the request in col.64, lines 34-50).

24. As to claims 28,29, 30, Wise also determined system reconfiguration capacity prior to utilizing the second set of configuration information to reconfigure for a second system operating mode (see the token information for reconfiguration in col.61, lines 5-22, see also the prediction filters to perform either filtering based on the token fig.17, col.69, lines 11-20).

25. As to claim 31, Wise also taught a first portion of the plurality of heterogeneous computational elements (see configuration carry-save multiplier , carry save adder, carry save subtractor in the common block) are operating in the first functional mode (x[3,4]) while a second portion of the plurality of heterogeneous computational

elements (see carry save multiplier, carry save subtractor, carry save subtractor) are being configured for the second functional mode (x[2,5]).

26. As to claim 115, Wise's also included differing computational elements (see carry save adder is different from carry save subtractor).

27. As to claim 116, Wise also independently configured his computational elements (see each connection path in fig.137).

28. As to claims 118, 119, Wise also selectively switched his data to the plurality of computational elements (see multiplexed circuit in fig.137).

29. As to claims 120, 121, Wise also provided a third mode (see the arithmetical functional modes set forth in the fig.137, see a third path at x input, see multiplexed circuit for selectively switching).

30. As to claims 125,126, Wise also included the interface circuit (see the input at X and output at y in fiog.137). As to the selectively switch, see multiplexed circuit in fig.137), and selectively routing.

31. As to claim 127, see multiplexer in fig.137.

32. As to the demultiplxers in clam 128, since no specific type of demultiplexers are being reflected into the claim, therefore, examiner holds that demultiplexers were already well known in the art.

33. As to claim 144, examiner holds that memory for holding a configuration information had been known in the art unlèss applicant can show unique type of memory and unique type of configuration.

34. As to claim 145, examiner holds that single chip with fixed and differing elements had been known in the art unless applicant can show unique type of single chip.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35. Claims 123, 124 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (5,768,561) in view of Brewer (5,519, 694) as applied to claim 1 above, and further in view of Baxter (5,794,062).

36. As to claims 123, 124, neither Wise nor Brewer specifically showed the self-routing as claimed.. However, Baxter included a self-routing (see the reconfigurable information stored in the memory by the directives in fig.2). It would have been obvious to one of ordinary skill in the art to use Baxter for including the self-routing as claimed because Wise also taught the determination of system reconfiguration capacity prior to utilizing the second set of configuration information to reconfigure for a second system operating mode (see the token information for reconfiguration in col.61, lines 5-22, see also the prediction filters to perform either filtering based on the token fig.17, col.69, lines 11-20)., and therefore suggested the need for self-routing, such as the reconfigurable information, or the like.

37. Claims 32-46, 48,49, 51-57, 60, 62-80, 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (5,768,561) in view of Baxter (5,794,062) in view of Brewer (5,519, 694).

38. As to claims 32,46, 48,49,51-57, 60, 62-76, 78-80, 82-85,87, Wise disclosed a system for adaptive configuration, the system comprising:

a) a first set of configuration information (see fig.137) , the first set of configuration information including a first subset of configuration information (see carry-save multiplier , carry save adder, carry save subtractor) and a second subset of configuration information (carry-save multiplier , carry save subtractor, carry save subtractor);

b) a plurality of heterogeneous computational elements, the plurality of heterogeneous computational elements including a first computational element (see resolving adder at y input) and a second computational element (see the d multiplier at x) , the first computational element having a first fixed architecture (adder) and the second computational element having a second fixed architecture (multiplier) , the first fixed architecture being different than the second fixed architecture; and

c) an interconnection network (see common block in fig.137) coupled to the plurality of heterogeneous computational elements, the interconnection network operative to configure the plurality of heterogeneous computational elements for a first functional mode x[3,4] of a plurality of functional modes, in response to the first subset of configuration information (see configuration carry-save multiplier, carry save adder, carry save subtractor in the common block), and the interconnection network further

operative to reconfigure the plurality of heterogeneous computational elements for a second functional mode (x[2,5]) of the plurality of functional modes, in response to the second sub set of configuration information (see carry save multiplier, carry save subtractor, carry save subtractor) , the first functional mode (x[3,4]) being different than the second functional mode (x[2,5]);

d) a plurality of switching elements (see multiplexer circuit in fig.137).

39. As to claim 32, Wise also selectively routed his configuration information (see the multiplexed circuit configuration in fig.137). As the step for receiving and transmitting , see the input at x bus and output at the y bus . As to the first level of interconnect network, see Paragraph above Wise in view of Brewer. As to the heterogeneous computational elements, no specific type of heterogeneous computational elements has been reflected into the claim, therefore, it is read as any computational element with different function. See carry-save multiplier, carry save adder, carry save subtractor in the common block in fig.137.

40. As to claims 32, 63, Wise taught selectively switching the inputs and outputs (see inputs X and output Y in fig.137). Wise also taught receiving and transmitting configuration information (see the input at X and output at Y in fig.137). Wise did not specifically showed the selectively routing trough his network data and first and second subsets of configuration to the plurality of the heterogeneous computational elements as claimed. However, Baxter taught selectively routing thought a network the

configuration information (see the Interconnect Matrix in fig.1, see also the Interconnect Matrix for selectively routing in col.10,, lines 26-38). It would have been obvious to one of ordinary skill in the art to use Baxter in Wise for including the selectively routing the first and second subset of configurations as claimed because the use of Baxter could provide Wise the capability to reconfigure the processing elements at a predefined set of selection, thereby increasing the flexibility of the configurations, and because Wise also taught his interconnection network (see the common box in 137 was a multiplexed circuit, see col.262, lines 14-19), which was a suggestion of the applicability of the selective routing, and for the above reasons , provided motivation.

41. Neither Wise nor Baxter specifically showed the first level and the second level as claimed. However, Brewer taught a switching network included multiple levels of routers or switches (see multistage routers in col.2, lines 14-27, col.8, lines 19-38 for two level hierarchy routers, see also col1. lines 5-15 for background teaching of the routers and switches). It would have been obvious to one of ordinary skill in the art to use Brewer in Wise for including the first level and second level as claimed because the use of Brewer could provide Wise the ability to include deeper levels of interconnection network , thereby expanding the system interconnectivities, and because Wise also taught a memory map for mapping hardware resources into the memory address (see col.259, lines 10-25), and that his multiplexed network (see interconnection common box in fig.137) showed the points at which needed to be stored (see col.262, lines 14-20), which was recognizable by one of ordinary skill in the

art that Wise's mapping of hardware resources were applicable for multilevel of the interconnect for purpose of higher level of network multiplexing.

42. As to claims 33, 34, 64,65, Wise also included a first set of configuration information including a first subset of configuration information (see carry-save multiplier , carry save adder, carry save subtractor) and a second subset of configuration information (carry-save multiplier , carry save subtractor, carry save subtractor);

43. As to claims 35, 66, wise also taught the first set of configuration information corresponds to a first system reconfiguration capacity (see the y[3,2] x[3,4] connection path in fig.137) and the second set of configuration information corresponds to a second system reconfiguration capacity (see the y[7,6] , x[2,5]) .

44. As to claims 36, 67, see fig.137, col.262, lines 14-20 , see the multiplexed circuit.

45. As to claims 37-40,68-70, Wise also showed the storage of the configuration information (see the RAM organized into common control block in col.265, lines 43-53, see also the common control block in fig.137 , for a machine-readable medium, see microprocessor read port in col.260, lines 32-35, see RAM in col.265, lines 43-53). See also teaching of Baxter and the reasoning of obviousness in the paragraph above.

46. As to claims 41,42,71 72, , Wise also taught the transmission through an air interface (carrier waves, see col.4, lines 21-23) , and transmitted through a wireline interface (see telephone line in col.4, lines 13-14.

47. As to claims 43,44, 73,74, Wise also taught configuration information embodied as a plurality of discrete information data packets , or a data team (see Discrete cosine transform in col.4, lines 1-11 for background, see also the data packet in col.13, lines 53-57).

48. As to claims 45, 75, Wise also taught memory, addition (see adder) , multiplication (see multiplier) , complex multiplication , subtraction (see subtractor) , configuration, reconfiguration, control, input, output (input and output) , and field programmability (see dynamic adaptive configuration in col.6, lines 57-67, col.7, lines 1-12).

49. As to claims 46,76, Wise also included linear algorithmic operations (see col.4, lines 8-9), non-linear algorithmic operations (see the transforms), finite state machine operations (see state machine stages in col.30, lines 62-67, col.31, lines 1-4), controller operations, memory operations (see col.39, lines 35-57), and bit-level manipulations (see bit operation in col.40, lines 15-28).

50. As to claim 78, see Wise in the background taught carrier waves by a transmitter (see carrier waves, see col.4, lines 21-23).

51. As to claim 48, Wise also included second d plurality of heterogeneous elements configured for controller to direct and schedule the configuration of the first and second modes (see the clock control circuit at input in fig.141).

52. As to claim 49, Wise was also operative to time and schedule the configuration and reconfiguration of the plurality of heterogeneous computational elements with corresponding data (see the pipeline control of the algorithm and the control clock signals in col.262, lines 55-65).

53. As to claim 51,52, Wise did not explicitly show the mobile station having a plurality of operating modes. However, Wise in the background taught carrier waves by a transmitter (see carrier waves, see col.4, lines 21-23). Therefore, Wise must have included a mobile station.

54. As to claims 53, 79, see servers in col.36, lines 14-19 in Baxter.

55. As to claims 54, 80, see the I/O T machines in fig.1.

56. As to claims 55, 85, Wise also taught request for configuration information (see the request in col.64, lines 34-50).

57. As to claims 56,57, Wise also determined system reconfiguration capacity prior to utilizing the second set of configuration information to reconfigure for a second system operating mode (see the token information for reconfiguration in col.61, lines 5-

22, see also the prediction filters to perform either filtering based on the token fig.17, col.69, lines 11-20).

58. As to claim 62, Wise also taught a first portion of the plurality of heterogeneous computational elements (see configuration carry-save multiplier , carry save adder, carry save subtractor in the common block) are operating in the first functional mode (x[3,4]) while a second portion of the plurality of heterogeneous computational elements (see carry save multiplier, carry save subtractor, carry save subtractor) are being configured for the second functional mode (x[2,5]) .

59. As to claims 82-84, examiner holds that local area network and wide area net work were already known in the art.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

60. Claims 16,19, 22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (5,768,561) in view of Brewer (5,519, 694) as applied to claims 1,17, 20, 23 above, and further in view of Lee et al. (5,873,045).

61. As to claims 24, 25, 26, limitations of parent claims have been discussed in previous paragraphs, therefore, it will not be repeated herein. Wise did not specifically show the personal digital assistance, multimedia reception, and paging as clamed. However, Lee disclosed personal digital assistance, multimedia reception, mobile packet-based communication (e.g. see col.3, lines 2-16). It would have been obvious to one of ordinary skill in the art to use Lee in Wise for included the personal digital assistance, multimedia reception, and paging as clamed because the use of Lee could provide Wise the ability to accept information from different type of devices(e.g. the cellular devices), and it could be done by predefine the mobile devices of Lee (e.g. the pager , personal assistant) into the configuration file of Wise with modified control parameters (e.g. the R/W format of the specific device) so that the specific mobile device of Lee could be recognized by Wise, and because Wise also taught carrier waves transmitter (see col. col.4, lines 21-23), which was a suggestion of the demand for including e mobile devices (e.g. the pager, or personal assistant), as taught by Lee , into Wise in order to provide the enhanced capability of the system in Wise, and for doing so, provided a motivation.

62. As to claims 16,19,22, Wise did not specifically show the single bit stream of the configuration information as clamed. However, Lee disclosed a single bit stream of configuration information see the conversion into the single ended signal in col.8, lines 46-51). It would have been obvious to one of ordinary skill in the art to use Lee in Wise for including the single bit stream as claimed because the use of Lee could provide Wise the ability to adapt to different type of configuration information, therefore,

increasing the capability of Wise to process a diverse set of configuration information, and Wise did disclose that his system was used for adapting to plurality of encoding standards (see col.1, lines 60-67), which was an indication of the need for including the conversion of the multi-standard encoding signals into a single integrated format in order to reduce the hardware space of the system, and therefore, provided a motivation.

63. Claims 47,50, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (5,768,561) in view of Baxter (5,794,062) in view of Brewer (5,519, 694), as applied to claims 32, 63, and further in view of Lee et al. (5,873,045).

64. As to claims 47,50,77, neither Wise nor Baxter specifically showed the single bit stream of the configuration information as clamed. However, Lee disclosed a single bit stream of configuration information see the conversion into the single ended signal in col.8, lines 46-51). It would have been obvious to one of ordinary skill in the art to use Lee in Wise for including the single bit stream as claimed because the use of Lee could provide Wise the ability to adapt to different type of configuration information, therefore, increasing the capability of Wise to process a diverse set of configuration information, and Wise did disclose that his system was used for adapting to plurality of encoding standards (see col.1, lines 60-67), which was an indication of the need for including the conversion of the multi-standard encoding signals into a single integrated format in order to reduce the hardware space of the system, and therefore, provided a motivation.

65. Claims 59, 61, 86, 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wise (5,768,561) in view of Baxter (5,794,062) in view of Brewer, as applied to claims 32,63, and further in view of Cohen et al. (6,005,943).

66. As to claims 59-61, 86-88, neither Wise nor Baxter nor Brewer specifically showed the decrypting the configuration, nor the authorization to receive the configuration as claimed. However, Cohen taught a decryptor and authorization of the configuration (see fig.2, col.8, lines 5-52). It would have been obvious to one of ordinary skill in the art to use Cohen in Wise for including the decryption and authorization of the configuration as claimed because the use of Cohen could provide Wise the ability to accept the configuration information based on a predetermined set of requirements and restrictions, therefore increasing system security in Wise. Cohen is used to also show that decryption had been known in the art.

Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Webb (4,760,525) in view of Brewer (5,519, 694).

67. As to claim 63, Webb (4,760,525) taught at least :

a) transmitting a first set of configuration information (see DATA2-DATA7 in fig.6), the first set of configuration information comprising a first subset of configuration information

(DATA2, DATA3, DATA2, DATA4) and a second subset of configuration information (DATA5, DATA3, DATA6, DATA7);

wherein when the first set of configuration information is received;

using the routing elements (601,602), selectively routing data and the first subset of configuration information through the interconnection network (see fig.6) to the first plurality of computational elements (see ALU1 ALU2) and selectively routing data (see DATA) and the second subset of configuration information through the interconnection network to the second plurality of computational elements (ALU4 ALU3) to provide a selected operating mode of a plurality of operating modes; and

using the switching elements (661,662) , configuring through the second level of the an interconnection network the first plurality of fixed and differing computational elements for a first functional mode (see the selection output odes RE1 RF and RG1 at MXB1 and MXB2 in fig.6) of a plurality of functional modes in response to the first subset of configuration information (see the selected input data at 661 and 662) , and a second plurality of fixed and differing computational elements (ALU4 ALU3) for a second different functional mode of the plurality of functional modes (see output modes at RE1 RF and RG1 at MXB3 and MXB4) in response to the second subset of configuration information (see input data at 663,664).

68. Webb did not specifically show the first level and the second level as claimed. However, Brewer taught a switching network included multiple levels of routers or switches (see multistage routers in col.2, lines 14-27, col.8, lines 19-38 for two level hierarchy routers, see also col1. lines 5-15 for background teaching of the routers and

switches). It would have been obvious to one of ordinary skill in the art to use Brewer in Webb for including the first level and second level as claimed because the use of Brewer could provide Webb the control capability to interconnect higher level of network, and because Webb also taught configuring through the second level of the interconnection network including a plurality of fixed and differing computational elements for a plurality of functional modes in response to the first subset of configuration information (see the selection output odes RE1 RF and RG1 at MXB1 and MXB2 in fig.6, see the selected input data at 661 and 662) which was recognizable by one of ordinary skill in the art that Webb's second level of interconnect network would have required at least first level and second level of routing or switching devices for interconnecting the multiplicity of computational elements, such as the one taught by Webb, and therefore, enhancing the interface hierarchy of the network elements.

69. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Widergren et al. (4,302,775) is cited for the background teaching of the single bit stream configuration word with the respective function mode (e.g. see the single composite data stream in of the data with the col.23, lines 24-37).
b) Nosenchuck et al. (4,811,214) is cited for the teaching of the reconfigurable computational elements and memory for storing the configuration (see fig.2, fig.6m co1.7, lines 54-68, co1.8, lines 1-13).
c) Furuta et al. (6,281,703) is cited for the matrices of computational elements (see fig.4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172. The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

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